

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Stephen C. Goshorn et al.
Application No. : 09/589,870
Filed : June 5, 2000
For : STREPTAVIDIN EXPRESSED GENE FUSIONS AND METHODS
OF USE THEREOF

Examiner : Stephen L. Rawlings
Art Unit : 1642
Docket No. : 110186.547
Date : March 22, 2005

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO REQUIREMENT FOR INFORMATION
UNDER 37 C.F.R. § 1.105

Commissioner for Patents:

Applicants understand the Requirement for Information under 37 C.F.R. § 1.105. The Examiner has requested the title, citation and a copy of each publication that any of the Applicants relied upon to develop the disclosed subject matter describing the Applicants' invention, in particular that which was relied upon to develop the "B9E9 scFvSA Fusions" described at pages 31 and 32 in Example II. The Examiner has further requested the title, citation and a copy of each publication (e.g., a catalog published by Bioprobe BV (Amstelveen, The Netherlands) listing the commercial availability of the antibody B9E9 or the hybridoma producing the antibody) that any of the Applicants relied upon to draft the subject matter of claims 25 and 27.

In developing the anti-CD20 fusion proteins, in particular the B9E9 scFvSA fusions described at pages 31 and 32 of Example II, Applicants used methods commonly available to carry out various aspects of the recombinant DNA technology. Applicants are unable to identify and direct the Examiner to particular references used at the time in carrying out these procedures. Applicants can, however, describe the approaches taken.

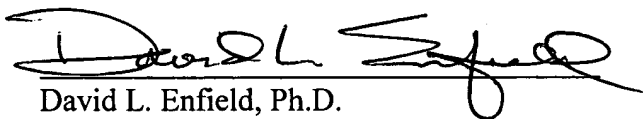
Applicants used two different approaches to identify or develop anti-CD20 binding proteins for use in developing the fusion proteins. One approach consisted of isolating human FAb antibodies from phage display libraries propagated in *E. coli*. An alternative approach consisted of identifying sources of commercially available anti-CD20 antibodies and purchasing the needed cDNA or antibody-expressing cell line from the vendor.

The B9E9 hybridoma cell line was purchased in 1998, under non-exclusive worldwide license, from Bioprobe NV (Amstelveen, The Netherlands), prior to the apparent move of this company to Indonesia. Applicants do not recall having access to anything other than the online listing of Bioprobe hybridomas (of record; courtesy copy enclosed). The B9E9 hybridoma cell line used in development expresses a murine IgG2a anti-CD20 antibody. It was developed through immunization of BALB/c mice with the Daudi lymphoblastoid cell line. The cDNAs for the V_L^* and V_H of B9E9 were obtained from total RNA from B9E9 hybridoma cells by reverse transcription reaction using oligonucleotides for the antibody constant regions of V_L and V_H . The variable regions were PCR-amplified from the cDNA using the constant region primers and degenerate variable region primers for V_L and V_H . The DNA sequences of the variable regions have been deposited in the GenBank database (Accession Numbers AF277091 for V_H and AF277092 for V_L).

Finally, in the context of this information, Applicants note that the B9E9-derived fusion protein is one exemplary embodiment of the invention and that the claims are directed to the fusion protein, not to the antibody or antigen-binding antibody fragments.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC



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DLE:jto

Enclosure:

Postcard

Bioprobe BV (Catalogue of Mouse Hybridomas)

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